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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,896	10/30/2003	David R. Oran	112025-0424C1	9197
24267	7590	02/14/2006	EXAMINER	
CESARI AND MCKENNA, LLP			BEHNCKE, CHRISTINE M	
88 BLACK FALCON AVENUE			ART UNIT	
BOSTON, MA 02210			PAPER NUMBER	
			3661	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/697,896	Applicant(s) ORAN ET AL
Examiner Christine M. Behncke	Art Unit 3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 and 18 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the Amendment and Remarks filed 29 September 2005, in which claims 21-56 were presented for examination.

Response to Arguments

2. Applicant's arguments with respect to claims 21-56 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 22, 24, 25, 27-32 and 34-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Requena, US Patent Application Publication No. 2002/0126701.

4. **(Claim 21)** Requena discloses a system for discovering and maintaining geographic location information for network sites, comprising: a portable computing unit having a location discovery entity (user device, Target/Client, Figure 8), a message generator configured to generate network messages ([0130]), and a communication facility for transmitting the network message onto a computer network ([0007] and figure

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1); and a location generator configured and arranged to determine physical coordinates for its current location (positioning function, [0127]), the location generator coupled to the computing unit for providing physical coordinates thereto ([0127]); whereby, the discovery entity and the message generator cooperate to acquire physical coordinates from the location generator for a given network site, and to load the acquired physical coordinates into one or more network messages ([0127], [0130], [0145] and Figure 5), and the communication facility transmits the one or more network messages containing the physical coordinates to a designated network entity (Location/Presence server, [0126]); and the one or more network messages correspond to an emergency call from the source entity ([0166], [0099]).

5. **(Claim 22)** Requena further discloses wherein the location generator includes a Global Positioning System (GPS) receiver for determining physical coordinates ([0127]).

6. **(Claim 24)** Requena further discloses wherein the portable unit comprises one or more antenna coupled to the location discovery entity of the portable computing unit (Figure 13) the one or more antenna configured to receive radio signals from a plurality of transmitting base stations ([0127] and Figure 13), wherein the radio signals, for triangulation purposes, would inherently be encoded with the physical coordinates of the respective base station, and the location discovery entity is configured to compute the physical coordinates for its current location based on the received radio signals ([0127]).

7. **(Claim 25)** Requena further discloses wherein the location discovery entity employs triangulation techniques to compute the physical coordinates for its current location ([0127]).

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8. **(Claim 27)** Requena further discloses wherein the given network site corresponds to a Voice over Internet Protocol (VoIP) Phone ([0012] and Figure 1).
9. **(Claim 28)** Requena discloses a method for discovering and maintaining location information of a plurality of network entities forming a computer network (Figure 1), the method comprising the steps of: utilizing a Global Positioning System unit to derive physical coordinates of a location associated with a first network entity of the computer network ([0127]); generating one or more network messages containing the physical coordinates derived for the network entity ([0127], [0130], [0145] and Figure 5); and sending the one or more network messages containing the physical coordinates to a second network entity of the computer network ([0126] and [0145]), whereby the second network entity associates the physical coordinates with the first network entity ([0126] and [0192]), and the one or more network messages correspond to an emergency call from the source entity ([0166], [0099]).
10. **(Claim 29)** Requena discloses a storage medium containing program instructions executable by a processing element for associating physical location information with one or more network messages originating from a source entity (Location server, [0126] and [0145]), the one or more network messages being directed to a destination entity ([0085]), the program instructions comprising program instructions for: receiving physical coordinates of the location of the source entity ([0145]); storing the physical coordinates received for the source entity ([0126]); receiving the one or more network messages originating from the source entity ([0145]); forwarding the one or more network messages toward the destination entity ([0065]); sending the physical

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coordinates received for the source entity to the destination entity ([0107]), and the one or more network messages correspond to an emergency call from the source entity ([0166], [0099]).

11. **(Claim 30)** Requena further discloses wherein the program instructions for sending comprise program instructions for appending the physical coordinates to at least one of the one or more network messages originating from the source entity ([0066], [0099], [0210]).

12. **(Claim 31)** Requena further discloses wherein the program instructions for sending comprise program instructions for: generating one or more network messages that are separate from the network messages originating from the source entity ([0066], [0099]); loading the physical coordinates into the one or more separate network messages ([0159], [0186]); and sending the one or more separate network messages to the destination entity ([0186], [0214]).

13. **(Claim 32)** Requena further discloses wherein the source entity is a Voice over Internet Protocol phone ([0012] and Figure 1).

14. **(Claim 34)** Requena further discloses wherein the program instructions are executed by a network switch having a memory ([0126]) and the physical coordinates are stored in the memory of the network switch ([0137]).

15. **(Claim 35)** Requena discloses a system for discovering and maintaining geographic location information for network sites, the system comprising: means for generating physical coordinates corresponding to the location of a first network entity ([0127]); means for loading the physical coordinates generated for the first network

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entity into one or more network messages ([0127], [0130], [0145] and Figure 5); means for sending the one or more network messages to a selected intermediate network device for storage thereby (Location server [0126] and [0145]), and the one or more network messages correspond to an emergency call from the source entity ([0166], [0099]).

16. **(Claim 36)** Requena further discloses wherein the generating means utilizes at least one of a plurality of GPS signals and an inertial navigation unit to generate the physical coordinates ([0127]).

17. **(Claims 37 and 38)** Requena discloses wherein the network site corresponds to the network entities of a computer network disposed within an office wherein the mobile unit includes but is not limited to wireless telephone, personal computers (Figures 7A, 7B, 8 and 13).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

18. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Requena in view of Lin et al., US Patent Application Publication No. 2002/0059420.

Requena discloses the system for discovering and maintaining geographic location previously described but does not disclose the use of an inertial navigation unit. However, Lin et al. teaches a networked position multiple tracking system for discovering and tracking the location of a mobile unit, wherein the location generator includes using a GPS receiver and a self-contained miniature inertial measurement unit

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(IMU) to produce signals responsive to the unit being moved ([0012] and [0031]-[0033]), the inertial navigation unit is coupled to a portable computing unit (system processor 30) for providing the inertial navigation signals thereto, and a discovery entity is configured to integrate the inertial navigation signals with physical coordinates acquired by a GPS receiver for a substitute location to produce physical coordinates for a given network site (position producer 10, [0038], and [0078]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Requena with the teachings of Lin et al. because as Lin et al. suggests, the inclusion of an inertial navigation unit allows the device to track an object/person inside an open area and a building uninterrupted and with increased accuracy ([0031]).

Claim Rejections - 35 USC § 103

19. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Requena in view of Fullerton et al., US Patent Application Publication No. 2003/0197643.

20. **(Claim 24)** Requena discloses the system for discovering and maintaining geographic location previously described but and further illustrates the use of a computing device with an antenna and the use of the network towers (Figure 13) based on radio cell information and a triangulation method does not disclose using radio signals that are Ultra Wideband signals for locating the position of the portable/mobile unit. Fullerton et al. teaches a system of locating a position of a mobile unit using an antenna coupled to a portable computing unit (directional antenna, [0118]), the one or

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more antenna configured to receive radio signals from a plurality of transmitting base stations ([0123]), wherein the radio signals are encoded with physical coordinates of the respective base station ([0116]), and the location discovery entity is configured to compute the physical coordinates for its current location based on the received radio signals ([0116]).

21. **(Claim 25)** Further, Fullerton et al. teaches employing triangulation techniques to compute the physical coordinates for its current location ([0116]).

22. **(Claim 26)** Further, Fullerton et al. teaches wherein the radio signals are Ultra Wideband (UWB) radio signals ([0078]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Requena with the teachings of Fullerton et al. because the taught triangulation technique of Fullerton et al. is a well known position discovery technique that is inexpensive comparatively to GPS, can be widely implemented, and with the use of UWB signals, which can transmit through earth, buildings and other obstructions, have a high level of accuracy ([0007]).

Claim Rejections - 35 USC § 103

23. **Claim 33** is rejected under 35 U.S.C. 103(a) as being unpatentable over Requena.

Requena discloses the method, system and storage medium for discovering and maintaining location information of a network entity wherein the network entity generates a message with the physical coordinates of the network entity loaded on the message and wherein the message may correspond to an emergency call. Requena

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does not explicitly disclose that, while the call may correspond to an emergency call, the destination of the message is to a Public Safety Answering Point. However, in the situation where the message is an emergency call and the user is requesting emergency services it would have been obvious to one of ordinary skill in the communication art for the destination to go to well known public dispatch office that receives 911 calls (PSAP), because it is well known that this public service dispatch office incorporates the local fire or police department, an ambulance service or a regional office covering all services. Therefore, wherein destination not otherwise specified, the one message destination would make the handling of the emergency message easier for the system.

Claim Rejections - 35 USC § 103

24. Claim 39, 40-47, 49-52, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Requena in view of Shmulevich et al., US Patent No. 6,515,985.

25. **(Claim 39)** Requena discloses the system for discovering and maintaining geographic location previously described wherein a message containing physical coordinates are received and stored by an intermediate device, but does not disclose that the intermediate device has a plurality of ports and the message from the first network/source entity is received on a given port. However, Shmulevich et al. teaches a cellular communications system wherein when a user device of one mobile switching center (MSC) attempts to send a message to another user of a different MSC, the message is sent to an intermediate device (call control block 186), wherein the intermediate device has a plurality of ports (Column 13, lines 36-49) and the message

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sent from the first device is received on and associated with a given port (Column 13, lines 36-49). It would have been obvious to one of ordinary skill in the electronic art at the time of the invention to combine the system and method of Requena with the teachings of Shmulevich et al. because as Shmulevich et al. teaches when there is an associated port for the user to determine the proper IP the calls are easier to switch, allowing for quicker transmission (Column 13, lines 36-67).

26. **(Claims 45, 46, 50, 51, 55 and 56)** Requena discloses a method and system for discovering and maintaining geographic location information for network sites, comprising: generating physical coordinates corresponding to the location of a first network entity (positioning function, [0127]); loading the physical coordinates generated for the first network entity into one or more network messages ([0127], [0130], [0145] and Figure 5); sending the one or more network messages to a selected intermediate network device (Location/Presence server, [0126]); and receiving the physical coordinates generated for the first network entity at an intermediate device ([0126]). Further Requena discloses an intermediate device to discover geographic location information for network sites and a computer readable media on the intermediate network device, comprising: means for receiving a one or more network messages at the intermediate device ([0126] and [0145]), the one or more network messages carrying physical coordinates corresponding to the location of a first network entity ([0126]). Requena discloses the message is associated with an ID for storage in a memory, but does not disclose that the intermediate device has a plurality of ports and the message from the first network/source entity is received on a given port. However,

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Shmulevich et al. teaches a cellular communications system wherein when a user device of one mobile switching center (MSC) attempts to send a message to another user of a different MSC, the message is sent to an intermediate device (call control block 186), wherein the intermediate device has a plurality of ports (Column 13, lines 36-49) and the message sent from the first device is received on and associated with a given port (Column 13, lines 36-49). It would have been obvious to one of ordinary skill in the electronic art at the time of the invention to combine the system and method of Requena with the teachings of Shmulevich et al. because as Shmulevich et al. teaches when there is an associated port for the user to determine the proper IP the calls are easier to switch, allowing for quicker transmission (Column 13, lines 36-67).

27. **(Claims 47 and 52)** Requena further discloses generating the one or more network messages to correspond to an emergency call ([0166], [0099]).

28. **(Claims 49 and 54)** Requena further discloses using a Voice over Internet Protocol (VoIP) Phone ([0012] and Figure 1) as the first network entity.

29. **(Claims 41-44)** Requena discloses the method, system and storage medium for discovering and maintaining location information of a network entity wherein the network entity generates a message with the physical coordinates of the network entity loaded on the message and wherein the message may correspond to an emergency call.

Requena does not explicitly disclose that, while the call may correspond to an emergency call, the destination of the message is to a Public Safety Answering Point.

However, in the situation where the message is an emergency call and the user is requesting emergency services it would have been obvious to one of ordinary skill in the

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communication art for the destination to go to well known public dispatch office that receives 911 calls (PSAP), because it is well known that this public service dispatch office incorporates the local fire or police department, an ambulance service or a regional office covering all services. Therefore, wherein destination not otherwise specified, the one message destination would make the handling of the emergency message easier for the system.

Conclusion

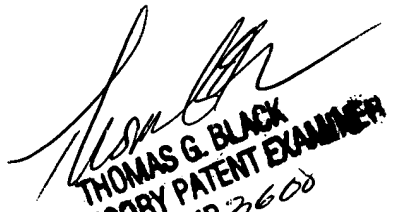
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (571) 272-8103. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12-10-2005


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